

**IN THE SPECIFICATION:**

Beginning on Page 2, please amend the application as follows:

- [4] ISI phenomena may be modeled mathematically. In the case where the data signal  $\mathbf{X}$  is populated by a number of data symbols  $x_n$ , captured signals  $y_n$  at the destination 120 may be represented as:

$$y_n = a_0 \cdot x_n + f(x_{n-K_1}, \dots, x_{n-1}, x_{n+1}, \dots, x_{n+K_2}) + \omega_n. \quad (1)$$

where  $a_0$  represents a gain factor associated with the channel 130,  $f(x_{n-K_1}, \dots, x_{n+K_2})$  is a functional representation that relates the ISI to the symbols,  $x_{n-K_1}, \dots, x_{n+K_2}$  causing ISI corruption and  $\omega_n$  represents corruption from other sources. In linear systems, Eq. 1 may reduce to:

$$y_n = x_n + \sum_{\substack{i=-K_1 \\ i \neq 0}}^{K_2} a_i \cdot x_{n-i} + \omega_n \quad (2)$$

where  $a_{-K_1}, \dots, a_{K_2}$  represent the ~~sampl~~ed-values of the impulse response of the channel. In accordance to common practice, the values  $a_i$  have been normalized by the value of  $a_0$  in Eq. 2.